

## **THE TREATMENT OF THE LIQUID REJECTS FROM THE PETROLEUM REFINERY OF ARZEW–ALGERIA TO THE MEDITERRANEAN LITTORAL**

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### **ABSTRACT**

During the process of transformation in the refinery of Arzew, some chemical products are brought into the industrial water treatment, which reaches the long term at their effectiveness, are rejected because they are polluted. This pollution is known on the practical level by the deterioration of the quality of the water rejected into the natural environment and to the sea, which bring to a degradation of the environment and with a reduction of oxygene dissolved in aquatic environment. Large quantities of used water, domestic and industrial, are cast each day, without any treatment, directly to the sea, which can be a serious source of pollution according to the degree of harmful effect of products (used oils, solvents, various muds and dangerous waste). The pollution in Algeria, is the origin thus, of the serious medical dangers to the population, and on the littoral, especially on the tourist structures. ALGERIA currently follows a very severe and rigorous environmental policy to fight the pollution.

In all the production factories, it is required to have stations of processing waste and especially to treat the used water. In the refinery of Arzew, which is on the Mediterranean littoral, the waste water coming from the zones of the production, is treated in two stations, where oils are recovered and the solid waste is eliminated, before this water is rejected to the sea. The station contains two basins, first basin PPI (Parallel Plaques Interceptor) to eliminate the bulky solid waste. The second API basin is a separator by gravity, which removes the free compounds of oil and other solids.

In end the water purified will be evacuated towards the sea.

The refinery of Arzew works for a protection of the environment, and to protect the littoral against the pollution by the installation of the stations for the purifying of the used water.

**KEY WORDS :** Pollution , Environment , Purifying , Waste Water .